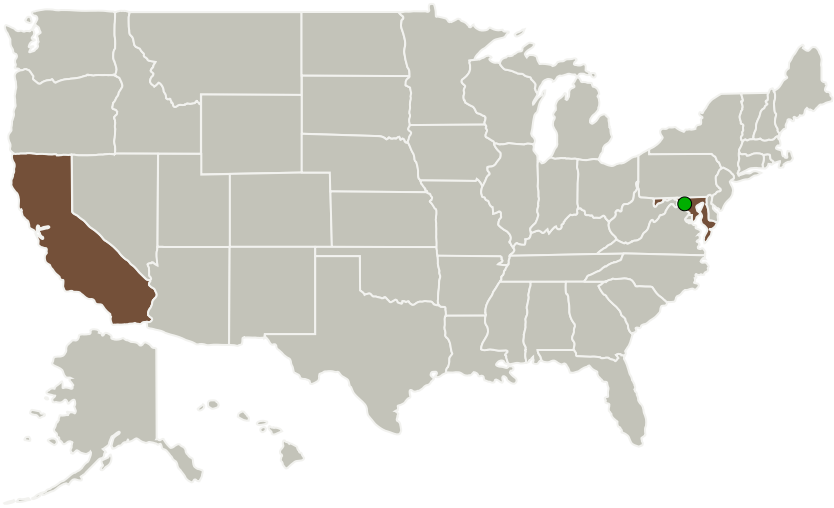
Fiberless Optical Gyroscope, Phase I

Completed Technology Project (2013 - 2013)

Project Introduction

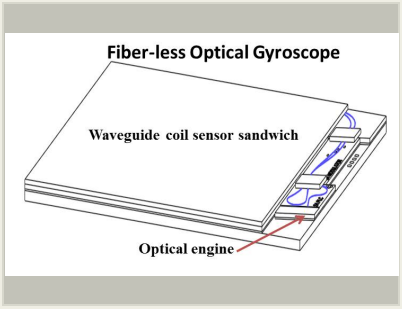
We propose a radical new approach for to the design and fabrication of a fiber-less Interferometric Optical Gyroscope (IOG) that enables the production of a very small IMU with better performance, higher reliability, high level of robustness and lower cost. Gener8 and InFiber Technology estimate that an order-of-magnitude better cost and size to performance ratio of IOG sensors and their corresponding assemblies can be achieved when compared to the conventional IFOG implementations.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Gener8, Inc.	Lead Organization	Industry	Sunnyvale, California
Goddard Space Flight Center(GSFC)	Supporting Organization	NASA Center	Greenbelt, Maryland

Primary U.S. Work Locations	
California	Maryland



Fiberless Optical Gyroscope

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Completed Technology Project (2013 - 2013)

Project Transitions

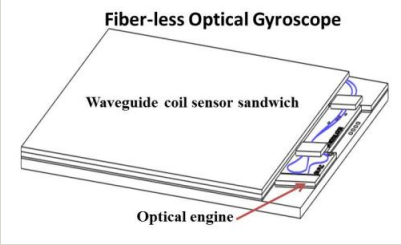
May 2013: Project Start

November 2013: Closed out

Closeout Documentation:

- Final Summary Chart*(https://techport.nasa.gov/file/140458)*

Images



Project Image
Fiberless Optical Gyroscope
(https://techport.nasa.gov/image/125882)

Organizational Responsibility

Responsible Mission Directorate:
Space Technology Mission Directorate (STMD)

Lead Organization:
Gener8, Inc.

Responsible Program:
Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:
Jason L Kessler

Program Manager:
Carlos Torrez

Principal Investigator:
William Bischel

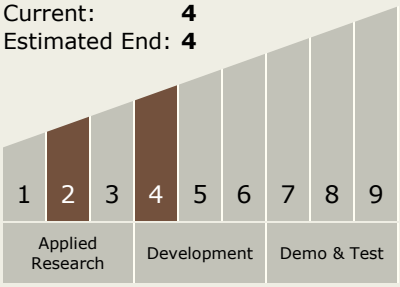
Co-Investigator:
William Bischel

Fiberless Optical Gyroscope, Phase I

Completed Technology Project (2013 - 2013)

Technology Maturity (TRL)

Start: **2**
Current: **4**
Estimated End: **4**



Technology Areas

Primary:

- TX05 Communications, Navigation, and Orbital Debris Tracking and Characterization Systems
  - TX05.1 Optical Communications
    - TX05.1.6 Optimetrics

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System